

**BIOLOGI DAN STATISTIKA DEMOGRAFI WERENG BATANG
COKLAT (*Nilaparvata lugens* Stal 1854) (HEMIPTERA:
DELPHACIDAE) PADA PADI VARIETAS CISOKAN DAN
KAHAYAN**



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BIOLOGI DAN STATISTIKA DEMOGRAFI WERENG BATANG COKLAT (*Nilaparvata lugens* Stal 1854) (HEMIPTERA: DELPHACIDAE) PADA PADI VARIETAS CISOKAN DAN KAHAYAN

ABSTRAK

Wereng batang coklat merupakan salah satu hama utama pada tanaman padi. Wereng batang coklat merusak tanaman padi dengan cara menghisap cairan sel tanaman padi. Penelitian ini bertujuan untuk mengetahui biologi dan statistika demografi wereng batang coklat *Nilaparvata lugens* Stal 1854, (Hemiptera: Delphacidae) pada padi varietas Cisokan dan Kahayan. Penelitian ini dilakukan pada padi varietas Cisokan dan Kahayan, biologi WBC diamati pada 10 pasang WBC per masing-masing varietas. Sedangkan statistika demografi diamati pada kohort telur yang dihasilkan oleh 10 pasang WBC uji. Parameter pengamatannya yaitu lama stadia, jumlah individu, siklus hidup dan pengamatan tambahan yaitu suhu dan kelembapan. Dan dianalisis untuk mendapatkan biologi, neraca kehidupan, kurva kesintasan dan statistika demografi. Hasil penelitian menunjukkan bahwa perbedaan varietas mempengaruhi lama stadia WBC dan jumlah individu yang dihasilkan WBC. Lama stadia telur, nimfa instar 1-4 pada varietas Cisokan lebih pendek dibandingkan varietas Kahayan. Sedangkan nimfa instar 5 dan imago pada varietas Cisokan lebih lama dibandingkan varietas Kahayan. Jumlah telur, nimfa dan imago pada varietas Cisokan lebih banyak dibandingkan varietas Kahayan. Kurva kesintasan varietas Cisokan dan Kahayan termasuk pada tipe I. Laju reproduksi dan laju intrinsik varietas Cisokan memiliki nilai yang lebih tinggi dibandingkan varietas Kahayan. Sedangkan rata-rata masa generasi varietas Cisokan lebih pendek dibandingkan varietas Kahayan.

Kata kunci: *biologi, wereng batang coklat, varietas cisokan, varietas Kahayan*

BIOLOGY DAN DEMOGRAPHY STATISTICS BROWN PLANTHOPPER (*Nilaparvata lugens* Stal 1854) (HEMIPTERA: DELPHACIDAE) ON CISOKAN AND KAHAYAN VARIETY RICE

ABSTRACT

Brown planthopper or BPH (*Nilaparvata lugens* Stal 1854, Hemiptera: Delphacidae) is one of the main pests in rice plant that destructive by sucking on saps. Difference in rice varieties is predicted to affect the biology and demographic statistics of BPH. The study aimed to determine the biology and demographic statistics of BPH on Cisokan and Kahayan varieties. BPH biology was observed from 10 pairs of BPH per each variety, while demographic statistic was observed from cohort of egg produced by 10 pairs of BPH. The parameters were number of individuals per stadia, life time and life span. Data were processed to obtain biology, survival curve and demographic statistic. The results showed that differences in varieties affected the life time and the number of individuals produced by BPH. The life time of the eggs, 1st – 4th instar of nymphs on Cisokan were shorter than Kahayan, but the 5th instar of nymphs and adult on Cisokan were longer than Kahayan. The number of eggs, nymphs and adults on Cisokan were higher than Kahayan. Both the survival curves on Cisokan and Kahayan were included as type 1. The reproduction and intrinsic rate on Cisokan were higher than Kahayan, while the generation time on Cisokan was shorter than Kahayan.

Keywords: *biology, brown planthopper, Cisokan variety, Kahayan variety.*



